

Docket No.: 064693-0074



**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of : Customer Number: 33401  
MARMARELIS, VASILIS Z., et al. : Confirmation Number: 4072  
Serial No.: 10/623,426 : Group Art Unit: 3737  
Filed: July 18, 2003 : Examiner: Not known  
For: OPTIMIZATION OF THE EXCITATION WAVEFORM FOR TRANSMIT-RECEIVE  
SYSTEMS

**CERTIFICATE OF MAILING UNDER CFR 1.08**

I hereby certify that that on September 27, 2005, this correspondence is being deposited with the United States Postal Service as First Class Mail under 37 CFR 1.8(a) in an envelope addressed to Mail Stop Petitions, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

  
Jessica Brown

**AMENDMENT, PETITION AND FEE TO  
ADD INVENTOR UNDER 37 CFR 1.48**

Mail Stop Petitions  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**PETITION**

Assignee petitions the Commissioner to correct the inventorship of the above-identified patent application in all appropriate records of the U.S. Patent and Trademark Office.

**AMENDMENT**

Please amend the records for the above-identified application to jointly name all of the following three inventors (one of whom is newly added):

Vasilis Z. Marmarelis;

Ramez Emile Necola Shehada; and

Tae-Seong Kim

#### REMARKS

This application was originally filed in the names of Vasilis Z. Marmarelis and Tae-Seong Kim. Applicants are requesting amendment of the records to add one more joint inventor, Ramez Emile Necola Shehada.

As shown by the attached Statement by the added inventor, Dr. Shehada believes he is a joint inventor of the subject matter claimed in this application but was omitted from the list of inventors on the filing papers through no deceptive intent on his part. As shown by the attached Statements of Marmarelis and Kim, Dr. Shehada is a joint inventor of the subject matter claimed in this application but was omitted from the list of inventors on the filing papers through no deceptive intent on their parts.

All three of the inventors have executed a new Declaration in compliance with 37 CFR 1.63, which is filed herewith.

The originally named inventors assigned the application to Alfred E. Mann Institute for Biomedical Engineering at the University of Southern California, as shown by the assignment recorded in the U.S. Patent and Trademark Office (Reel 014764 Frame 0636). The Assignee's Consent is also attached.

The Commissioner is hereby authorized to charge the Petition Fee of \$130.00 (37 CFR 1.17(i)) to Deposit Account 501946.

Applicants submit that the Petition and accompanying documentation satisfies all requirements for correction of inventorship under 37 CFR 1.48(a). An early consideration and grant of this Petition, as well as a prompt entry of the amendment of the inventorship on the Patent, are earnestly solicited.

Respectfully submitted,

MCDERMOTT WILL & EMERY LLP

Marc E. Brown

Registration No. 28,590

2049 Century Park East, Suite 3400  
Los Angeles, California 90067  
Phone: (310)-788-4125  
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Date: September 27, 2005

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For: OPTIMIZATION OF THE EXCITATION WAVEFORM FOR TRANSMIT-RECEIVE  
SYSTEMS

**ASSENT OF ASSIGNEE TO CORRECTION AND/OR ADDITION TO  
ORIGINAL NAMED INVENTOR(S)**

Commissioner for Patents  
Washington, DC 20231

Sir:

Alfred E. Mann Institute for Biomedical Engineering at the University of Southern California

(type or print name of assignee)

1042 Downey Way DRB B21

(address)

Los Angeles, CA 90089-1112

## Assignment:

☒ recorded on June 22, 2004 from Vasilis Z. Marmarelis and Tae-Seong Kim  
Reel 014764  
Frame 0636

☒ recorded herewith

☒ A separate "ASSIGNMENT" (DOCUMENT) COVER SHEET on behalf  
of Ramez Emile Necola Shehada

hereby assents to the correction of inventorship filed

☒ herewith  
☐ on

## ASSIGNEE CERTIFICATION

In accordance with 37 CFR 3.73, the assignee hereby certifies that the evidentiary documents with respect to its ownership have been reviewed and that, to the best of the assignee's knowledge and belief, title is in the assignee seeking to take this action.

Peter Handman 9/22/05  
Signature Date

**Signature**

Date \_\_\_\_\_

Peter Staudhammer, Ph.D, Director

Name and title of person authorized to sign on behalf of assignee

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## ASSIGNMENT

WHEREAS, I, Ramez Emile Necola Shehada, ("ASSIGNOR") have invented "OPTIMIZATION OF EXCITATION WAVEFORM FOR NONLINEAR TRANSMIT-RECEIVE SYSTEMS" ("Invention") have invented certain new and useful improvements disclosed in an application for United States Patent Application Serial No. 10/623,426, filed July 18, 2003;

WHEREAS, I am a joint inventor of the Invention;

WHEREAS, Alfred E. Mann Institute for Biomedical Engineering at the University of Southern California, ("ASSIGNEE") is a corporation organized and existing under the laws of Delaware USA, having a place of business at 1042 Downey Way, DRB B21, Los Angeles, CA 90089-1112.

WHEREAS, ASSIGNEE desires to acquire the entire right, title and interest in and to the Invention and Application and to all patents based on the Application;

ASSIGNOR and ASSIGNEE, for valuable consideration, the receipt and legal sufficiency of which is hereby acknowledged, ASSIGNOR and ASSIGNEE, ASSIGNOR have and hereby do assign and transfer to ASSIGNEE, its successors and assigns, the entire right, title and interest in and to:

1. The Invention;
2. The Application;
3. All applications based on or claiming priority from the Application, including all divisionals and continuations ("Application Family");
4. All patents which may be granted on the Invention, Application and Application Family by the United States of America, its territories and possessions, and by all foreign countries, including all priority rights and all reissues thereof ("Patents"); and
5. The right to sue for past infringement of the Invention, Application, Application Family and Patents.

ASSIGNOR agree, at the request of ASSIGNEE, to sign any and all papers reasonably needed to file and prosecute the Application and Application Family, to obtain the Patents, and to perfect and vest in ASSIGNEE the entire right, title and interest in the Invention, Application, Application Family and Patents. ASSIGNOR also agree to provide assistance that is reasonably needed to prepare and prosecute the Application and Application Family.

ASSIGNOR authorize and empower ASSIGNEE, its successors and assigns, to apply for and obtain, in its own name, the Application, Application Family and Patents before competent International Authorities, including the World Intellectual Property Organization and in any and all foreign countries in which applications for patents can be made or patents obtained.

Dated: 9/19, 2005Ramez Emile Nicola Shehada

Name: Ramez Emile Nicola Shehada

Address: 14759 Hardaway Drive

La Mirada, California 90638-3030

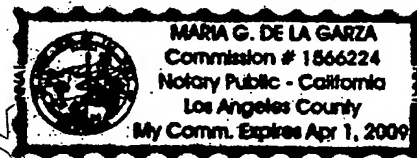
STATE OF CALIFORNIA     )  
   ) ss.  
 COUNTY OF LOS ANGELES    )

On Sept. 19, 2005 before Maria De La Garza personally appeared Ramez Emile Nicola Shehada, ☐ personally known to me or ☒ proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/~~she~~/they executed the same in his/~~her~~/their authorized capacity(ies); and that by his/~~her~~/their signature(s) on the instrument, the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Maria De La Garza  
 Notary Public

(SEAL)

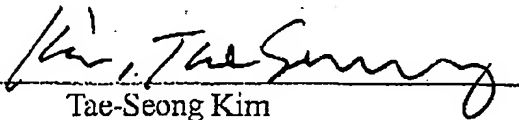


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In re Application of	:	Customer Number: 33401
MARMARELIS, VASILIS Z., et al.	:	
Serial No.: 10/623,426	:	Group Art Unit: 3737
Filed: July 18, 2003	:	Examiner: Not known
For:		OPTIMIZATION OF THE EXCITATION WAVEFORM FOR TRANSMIT-RECEIVE SYSTEMS

I, TAE-SEONG KIM, hereby affirm that I am a joint inventor of the above-referenced application, together with Ramez Emile Necola Shehada and Vasilis Z. Marmarelis and that the error in inventorship occurred without deceptive intention on my part on or about the time of the actual filing of the referenced application.

  
Tae-Seong Kim

COPY

Date:

7/22/05



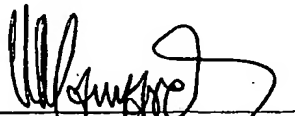
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Serial No.: 10/623,426 : Group Art Unit: 3737  
Filed: July 18, 2003 : Examiner: Not known  
For: OPTIMIZATION OF THE EXCITATION WAVEFORM FOR TRANSMIT-RECEIVE  
SYSTEMS

I, VASILIS Z. MARMARELIS, hereby affirm that I am a joint inventor of the above-referenced application, together with Ramez Emile Necola Shehada and Tae-Seong Kim and that the error in inventorship occurred without deceptive intention on my part on or about the time of the actual filing of the referenced application.

  
\_\_\_\_\_  
Vasilis Z. Marmarelis

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Date: 7/22/05

Docket No.: 064693-0074

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Serial No.: 10/623,426	:	Group Art Unit: 3737
Filed: July 18, 2003	:	Examiner: Not known
For:	:	
OPTIMIZATION OF THE EXCITATION WAVEFORM FOR TRANSMIT-RECEIVE SYSTEMS		

I, RAMEZ EMILE NECOLA SHEHADA, hereby affirm that I am a joint inventor of the above-referenced application, together with Vasilis Z. Marmarelis and Tae-Seong Kim and that the error in inventorship occurred without deceptive intention on or about the time of the actual filing of the referenced application.

Ramez Emile Necola Shehada  
Ramez Emile Necola Shehada

Date:

7/23/2005

COPY

## DECLARATION AND PETITION

As a below named inventors we hereby declare that:

Our residence, post office addresses and citizenship are as stated below next to our names.

We believe we are the original, first and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled "OPTIMIZATION OF EXCITATION WAVEFORM FOR NONLINEAR TRANSMIT-RECEIVE SYSTEMS," the specification of which is Application Serial No. 10/623,426, filed July 18, 2003.

We hereby state that we have reviewed and understand the contents of the above identified specification, including the claims.

We acknowledge the duty to disclose information which is material to the examination of this application in accordance with 37 C.F.R. § 1.56(a).

We hereby claim foreign priority benefits under 35 U.S.C. § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application of which priority is claimed.

### PRIOR FOREIGN APPLICATION(S)

Number	Country	Filing Date	Priority Claimed?
NONE			

### PRIOR UNITED STATES APPLICATION(S)

We hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of 35 U.S.C. § 112, we acknowledge the duty to disclose material information as defined in 37 C.F.R. § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

Application Serial No.	Filing Date	Status

### PRIOR UNITED STATES PROVISIONAL APPLICATION

We hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

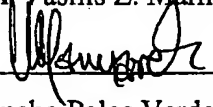
Application Serial No.	Filing Date	Status
60/397,378	July 19, 2002	Provisional

We hereby declare: All statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true. These statements were made with the knowledge that willful false statements and the like so made are punishable by

fine or imprisonment, or both, under 18 U.S.C. § 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Wherefore we pray that Letters Patent be granted to us for the invention or discovery described and claimed in the foregoing specification and claims, and we hereby subscribe our names to the foregoing specification and claims, declaration, and this petition.

**Full name of first inventor** Vasilis Z. Marmarelis

Inventor's signature  Date 7/22/05

Residence: Rancho Palos Verdes, California

Citizenship: United States of America

Post Office Address 37 Headland Drive

Rancho Palos Verdes, California 90275-5117

**Full name of second inventor** Ramez Emile Necola Shehada

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence: La Mirada, California

Citizenship: United States of America

Post Office Address 14759 Hardaway Drive

La Mirada, California 90638-3030

**Full name of third inventor** Tae-Seong Kim

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence: Fullerton, California

Citizenship: Republic of Korea

Post Office Address 3097 Primrose Lane

Fullerton, California, USA 92833

fine or imprisonment, or both, under 18 U.S.C. § 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Wherefore we pray that Letters Patent be granted to us for the invention or discovery described and claimed in the foregoing specification and claims, and we hereby subscribe our names to the foregoing specification and claims, declaration, and this petition.

**Full name of first inventor** Vasilis Z. Marmarelis

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence: Rancho Palos Verdes, California

Citizenship: United States of America

Post Office Address 37 Headland Drive  
Rancho Palos Verdes, California 90275-5117

**Full name of second inventor** Ramez Emile Necola Shehada

Inventor's signature Ramez Emile Necola Shehada Date 7/23/2005

Residence: La Mirada, California

Citizenship: United States of America

Post Office Address 14759 Hardaway Drive  
La Mirada, California 90638-3030

**Full name of third inventor** Tae-Seong Kim

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence: Fullerton, California

Citizenship: Republic of Korea

Post Office Address 3097 Primrose Lane  
Fullerton, California, USA 92833

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**Full name of first inventor** Vasilis Z. Marmarelis

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence: Rancho Palos Verdes, California

Citizenship: United States of America

Post Office Address 37 Headland Drive  
Rancho Palos Verdes, California 90275-5117

**Full name of second inventor** Ramez Emile Necola Shehada

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence: La Mirada, California

Citizenship: United States of America

Post Office Address 14759 Hardaway Drive  
La Mirada, California 90638-3030

**Full name of third inventor** Tae-Seong Kim

Inventor's signature *Tae Seong Kim* Date 07/22/05

Residence: Brea, California

Citizenship: Republic of Korea

Post Office Address 205 S. Poplar Ave  
Brea, California, USA 92821